BenQ DC P1410 Digital Camera User Manual

Welcome

BenQ ecoFACTS

BenQ has been dedicated to the design and development of greener product as part of its aspiration to realize the ideal of the "Bringing Enjoyment 'N Quality to Life" corporate vision with the ultimate goal to achieve a low-carbon society. Beside meeting international regulatory requirement and standards pertaining to environmental management, BenQ has spared no efforts in pushing our initiatives further to incorporate life cycle design in the aspects of material selection, manufacturing, packaging, transportation, using and disposal of the products. BenQ ecoFACTS label lists key eco-friendly design highlights of each product, hoping to ensure that consumers make informed green choices at purchase. Check out BenQ's CSR Website at http://csr.BenQ.com/ for more details on BenQ's environmental commitments and achievements.



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WEEE

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CE Regulatory Notice

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is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the Laws of the Member States relating Electromagnetic Compatibility (2004/108/EC); the Low Voltage Directive (2006/95/EC); the Restriction of The Use of Certain Hazardous Substances in Electrical And Electronic Equipment Directive (2002/95/EC), Turkish EEE Directive; the Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, and the Directive 2009/125/EC of the European parliament and of the council establishing a framework for the setting of eco-design requirements for energy-related products.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Safety warning and notice

Before operating the camera, please make sure that you read and fully understand the content in this section. If you ignore and violate all safety warning notices indicated in this section, the camera warranty may be void. Meanwhile, not only the camera but also you and all other people and things around you may be severely damaged, injured, or even placed in danger of death.

For your safety

- Keep the camera and its accessories out of the reach of babies, toddlers, and children. In particular, small parts such as memory cards and batteries could be easily dismantled and swallowed by them.
- Use only the original accessories to avoid possible risks to health and property, and thus meet all related legal regulations.
- · Do not dismantle the camera under any circumstances.
- When using the flash, do not go too close to human eyes (particularly for babies, toddlers, and children) or animal eyes. Otherwise, when the flash fires, the light may cause damage to human eyes or irritate animals.
- Batteries could explode, for instance. All batteries can cause property damage, injury or burns if a conductive
 material such as jewelry, keys or beaded chains touch exposed terminals. The material may complete an
 electrical circuit and become quite hot. Exercise care in handling any batteries, particularly when placing it
 inside your pocket, purse, or other container with metal objects. Do not dispose of batteries in fire as they may
 explode.
- To prevent electric shock, do not attempt to disassemble or repair your camera by yourself.
- Some camera models accept non-rechargeable batteries. When using these batteries, do not charge them.
 Otherwise, dangers such as explosion and fire may occur.

Warranty

- Warranty is void if damage or system failure occurred due to outside factors such as collision, fire, flood, dirt, sewage, earthquake, and other force majeure events as well as incorrect usage of electricity or use of nonoriginal accessories.
- It is the sole responsibility of the user if problems (such as data loss and system failure) occurred due to non-factory installed software, parts, and/or non-original accessories.
- Do not change the camera. Any changes to the camera invalidate the warranty.

Taking care of your camera

- Always keep the camera in the accompanying leather case or pouch for better protection against splashes, dust, and collision.
- The only way of replacing the battery and the memory card is to open the Battery / Memory cover.
- Dispose of unwanted batteries and cameras as permitted by the laws in your countries.
- Water may cause a fire or electric shock. Therefore, store your camera in a dry place.
- If your camera becomes wet, wipe it with a dry cloth as soon as possible.
- · Salt or seawater may cause severe camera damage.
- Do not drop, knock, or shake the camera. A rude behavior of using the camera may damage the internal electronic circuit board, deform the lens shape, or make the lens unretractable.
- · Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the camera.
- Finger grease may be left on the camera lens and will result in unclear images or videos. To avoid this problem, be sure to clean the camera lens before taking pictures or recording videos. You should also clean the camera lens on a regular basis.
- · If the lens is dirty, use a lens brush or soft cloth to clean the lens.
- · Do not touch the lens with your fingers.
- If a foreign substance or water gets in your camera, please turn the power off immediately and disconnect the batteries. Next, remove the foreign substance or water and send it to the maintenance center.
- Whenever there is data in the internal memory or the external memory card, you should make a backup copy
 to a computer or disc. So, you can have a backup solution if data loss occurs.

- If the lens cannot retract into the camera, please replace the batteries first (usually this is because of drained batteries). Then the lens should retract automatically. If the lens still cannot retract, please contact your dealer.
- · Under no circumstances should you push the lens back manually as this may damage the camera.
- All original accessories are designed only for use with this camera model you purchased. Do not use these
 accessories with other camera models or cameras of other brands to avoid unpredictable danger or damage.
- · Before initial use of a memory card, always use the camera to format the card first.
- Remember to slide the write-protect tab (if available) to the unlock position. Otherwise, all data (if any) on the memory card is protected and the card cannot be edited or formatted.

Operating environment

- · Do not use or store your camera in the environments listed below:
 - · Direct sunlight
 - · Dusty places
 - · Next to an air conditioner, electric heater or other heat sources
 - · In a closed car that is in direct sunlight
 - · Unstable locations
- · Do not use your camera outdoors when it is raining or snowing.
- · Do not use your camera in or near water.
- The camera operating temperature is between 0 and 40 degrees Celsius. It is normal for the operating time to be shortened when the temperature is low.
- · The capacity of your camera batteries will reduce each time it is charged/emptied.
- Storage at too high or low temperatures will also result in a gradual capacity loss. As a result, the operating time of your camera may be considerably reduced.
- It is normal for the camera to become warm during operation, because the camera casing can conduct heat.
- The LCD display on this camera is manufactured with sophisticated technology, and more than 99.99%
 of the pixels on the LCD display meet standard specifications. Yet, it is possible that less than 0.01% of
 the pixels on the LCD display may have some light spots or show unusual colors. This is normal and
 does not indicate display malfunction, nor will this affect the pictures you take with the camera.
 - The LCD monitor looks darker in strong sunlight or bright light. This is not a malfunction.
 - To prevent your images from being blurred while pressing the shutter button, always hold the camera steady. This is especially important when you are shooting under low lighting conditions, under which your camera may reduce the shutter speed to ensure your images are properly exposed.



Do not hold the camera by excessive force. Plus, be sure to protect the camera from strong impacts.



To avoid accidental falling, please attach the hand strap to the camera and always hold the camera by keeping the hand strap around your wrist.



If the battery suddenly depleted and caused the lens fail to retract, please carefully protect the lens to avoid collision and insert a battery with full power ASAP.



When the camera is not in use, always turn the power off and make sure the lens has retracted successfully before storing the camera in its case. If you do not intend to use the camera for a long time, please remove the battery from the camera and store the battery carefully.



Keep your camera away from sharp objects and avoid collision.



When the camera is not in use, please place it in a steady place. Plus, always keep your camera away from pressure or any other similar environment (for example, in a pant pocket) to avoid possible damage.

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INTRODUCTION

Overview

Congratulations on your purchase of the new digital camera.

Capturing high-quality digital images is fast and easy with this state-of-the-art smart camera. Equipped with a 14.0-megapixel CCD, this camera is capable of capturing images with a resolution of up to 4288 x 3216 pixels.

Package Contents

Carefully unpack your camera and ensure that you have the following items:

Common Product Components:

- Digital Camera
- Quick Guide
- Bundled CD-ROM (Application Software and INSTRUCTION MANUAL)
- Camera strap
- Camera pouch
- Rechargeable lithium-ion battery
- AV cable
- USB cable
- USB-AC adapter

Common (Optional) Accessories:

■ SD/SDHC memory card



Accessories and components may vary by retailer.

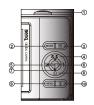
GETTING TO KNOW YOUR CAMERA

Front View



- 1. Zoom lever
- 2. Flash
- 3. ON/OFF Power button
- 4. Status LED
- 5. Self-timer LED
- 6. Microphone
- 7. Lens

Rear View





- A. LCD monitor
- B. USB and AV OUT terminal
- C. Strap holder
- D. Battery / Memory card cover
- E. Tripod socket
- F. Speaker

Item	Function						
item	Capture Mode Video Mode		Playback Mode				
1.	Shutter button	Record button	Still image: to capture mode Video clip: to capture mode				
2.	Switches to: Video mode > Capture mode	Switches to: Capture mode > Video mode	Still image: to capture mode Video clip: to capture mode				
3.	Playback mode	Playback mode	Still image: to capture mode Video clip: to capture mode				
4.	Focus	Focus	(+90°				
5.	Compensation ∠ > ∑ Adjust AV / TV value		Previous Image				
6.	Flash		Next Image				
7.	If any scene mode is set: switches to scene mode selection screen		Still image: to display image Records voice memo (if "Voice Memo" is "Record"). Video clip: to play video clip				
8.	Self-timer	Self-timer	∙ 90°				
9.	Capture menu	Video menu	Playback menu				
10.	-		Delete				

LCD Monitor Display

Capture mode

```
Flash mode
[4A]
         Auto
i 4 i
         Flash On
i@i
         Flash Off
         Red-eye
[40]
[48]
         Slow Sync
[44]
         Pre-flash
```

Focus setting

[[ém]] Auto AF Tracking [≥] Face Detect [#1 Macro [#s] Super Macro [00] Infinity

Self-timer & Self-portrait icon

[**③**] [渋] Self-portrait ાંછાં 2 sec. िं 10 sec. [Qi] 10+2 sec. O.I.S.

5. Zoom status

Available number of shots

Storage media Internal memory (no card) [FINT]

[SD/SDHC memory card Image size resolution

[14] 4288 x 3216 i 🖁 i 3264 x 2448 141 2304 x 1728 1600 x 1200 [&] [VGA] 640 x 480

Image quality ı⊞i Fine i⊞i Standard i 🔳 j Economy

10. ISO

题] 100] Auto ISO 100 150 200 150 400 150 800 150 1600 ISO 200 ISO 400 ISO 800

ISO 1600 ISO] ISO 3200 ISO 6400

Exposure compensation

(It can not be used in below modes: Intelligent Scene, Av, Tv, Smile Detection, LOMO, Fish eye, Toy, HDR, De-blemish, Skin Soften, Portrait Man & Portrait Lady.)

Backlight correction

(It can only be used in De-blemish, Skin Soften, Portrait Man and Portrait Lady.)

12. White balance [編] Auto

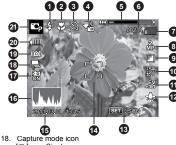
į∗i Incand. iΨi Fluoresc.1 i罗i Fluoresc.2 [*****] Daylight Cloudy [44·] Manual WB

13. Set key: SCN hint icon

14. Main focus area 15. Date and time

16. [Histogram

17. Quick shot



Single [54] Continuous AEB (Auto Exposure Bracketing) Album Shot

Burst Cont.flash Pre-shot inai Coupl.shot [🕮 Burst 30fps

Interval capture i en i Slow shutter warning

Battery condition

Full battery power ì⊡i Medium battery power i⊡i Low battery power i 🗆 i No battery power

Mode icon / Scene mode

Auto Intelligent Scene Program AE Αv Tν Smile Detection

Anti-shake Panorama PanCapture

LOMO Fisheye

Toy ĸ. HDR .e. De-blemish Skin Soften

2 Portrait Man Portrait Lady 温せる Night Scene Night Portrait Fireworks

Candlelight Sports Pets Landscape

(8) 2∆] D 44 Natural Green Flow Water * Splash Water 26 28 28 Sunset

iii &

Sunrise Snow Beach

Video mode

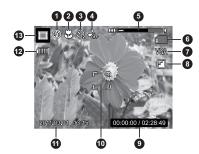
- 1. Flash off
- 2. Focus setting
- 3. Self-timer icon
- 4. Audio off
- 5. Zoom status
- 6. Storage media
- 7. Video resolution
- 8. Video quality
- 9. Elapsed time / Available recording time
- 10. Main focus area
- 11. Date and time
- 12. Battery condition
- 13. Mode icon

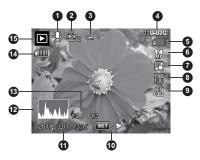
Playback mode - Still image playback

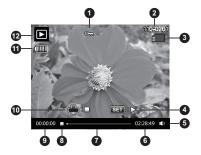
- 1. Voice memo
- 2. DPOF icon
- 3. Protect icon
- 4. Folder / File number
- 5. Storage media
- 6. Image size resolution
- 7. Image quality
- 8. ISO
- 9. Exposure value
- 10. Set key: Play hint icon
- 11. Date and time
- 12. Histogram
- 13. Aperture value / Shutter speed
- 14. Battery condition
- 15. Mode icon

Playback mode - Video playback

- 1. Protect icon
- 2. Folder / File number
- 3. Storage media
- 4. Set key: Play / Pause hint icon
- 5. Volume mode
- 6. Total recorded time
- 7. Video status bar
- 8. Video condition icon
- 9. Elapsed time
- 10. Down key: Stop hint icon
- 11. Battery condition
- 12. Mode icon







GETTING STARTED

Preparation



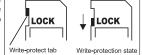




- 1. Attach the camera strap.
- 2. Open the battery/memory card cover.
- 3. Insert the supplied battery with correct orientation as shown.
- 4. Insert an SD/SDHC memory card (Optional).
 - The camera has 32MB internal memory(23MB available for image storage), but you can load an SD/SDHC memory card to expand the camera's memory capacity.
 - Be sure to format the memory card with this camera before its initial usage.
- 5. Close the battery/memory card cover and make sure it is locked securely.



To prevent valuable data from being accidentally erased from an SD/SDHC memory card, you can slide the write protect tab (on the side of the SD/SDHC memory card) to "LOCK"



 To save, edit, or erase data on an SD/SDHC memory card, you must unlock the card.

To prevent damaging of an SD/SDHC memory card, be sure to turn off the power when inserting or removing the SD/SDHC memory card. If inserting or removing the SD/SDHC memory card with the power on, the camera will automatically turn off.

Turn the Camera On by Pressing Playback Button

- 1. Press the ▶ button for about 3 seconds to turn the camera on and begin playback.
 - Lens do not zooms out/in in this playback preview.
 - The camera will turn off automatically if no operations are performed for the length of time selected in the Auto off menu.
- Press the ▶ button again or press the ON/OFF button to turn the camera off, or press the shutter button to enter the capture mode.

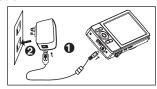


Charging the Battery

The battery is not fully charged at the time of purchase. Fully charge the battery and discharge it for at least one complete cycle before use to maximize its performance and lifetime.

- 1. Connect camera to USB-AC adapter with USB cable.
- 2. Insert the plug into a wall outlet.

Status LED	Description		
Green (blinks slowly)	Charging normally		
Off	Charging finished		
Green (blinks quickly)	Error		





- The included USB-AC adapter differs depending on the region where you purchased the camera.
- User can also charge the battery by connecting camera to computer with USB cable.
- Charging time varies according to the ambient temperature and the status of battery.
- Please use the battery attached to this camera, other type batteries could not be charged by this camera.

Initial Settings

The language & date/time needs to be set if and when:

- The camera is turned on for the first time.
- The camera is turned on after leaving the camera without the battery for an extended period of time.
- 1. Press the **ON/OFF** button to turn the power on.
- Press any button to enter language setup. Select the displayed language with the ◀
 / ► / ▲ / ▼ buttons and press the SET button.
- 3. Select the date format with the ▲ / ▼ buttons, and press the **SET** button.
- Select the item's field with the ◀ / ▶ buttons and adjust the value for the date and time with the ▲ / ▼ buttons.
- 5. After confirming all settings are correct, press the SET button.
 - Half press the shutter button or press the MENU button will enter capture mode without saving the settings.

Setting the Date and Time

When the date and time information is not displayed on the LCD monitor, follow these steps to set the correct date and time.

- 1. Press the **MODE** button, and set the camera mode to [] or []; or press the D button.
- Press the MENU button.
- Select the [Setup] at the end of the Menu with the
 ▲ / ▼ buttons, and press the SET button.
- Select [Date/Time] with the ▲ / ▼ buttons, and press the SET button.
- Select the date format with the ▲ / ▼ buttons, and press the SET button.
 - Select the item's field with the ◀ / ▶ buttons and adjust the value for the date and time with the ▲ / ▼ buttons.
 - The time is displayed in 24-hour format.
 - After confirming all settings are correct, press the SET button.
- To exit from the [Setup] menu, press the MENU button.





Choosing the Language

Specify in which language menus and messages are to be displayed on the LCD monitor.

- Press the MODE button, and set the camera mode to [o] or [i]; or press the button.
- 2. Press the MENU button.
- Select [Language] with the ▲ / ▼ buttons and press the SET button.
- 5. Select the displayed language with the ◀ / ► / ▲ /
 - ▼ buttons and press the SET button.
 - The setting will be stored.
- 6. To exit from the [Setup] menu, press the **MENU** button.



Formatting the Memory Card or Internal Memory

This utility formats the memory card (or internal memory) and erases all stored images and data.

- 1. Press the **MODE** button, and set the camera mode to [□] or [□]; or press the □ button.
- 2. Press the MENU button.
- Select the [Setup] at the end of the Menu with the
 ▲ / ▼ buttons, and press the SET button.
- Select [Format] with the ▲ / ▼ buttons, then press the SET button.
- Select [Execute] with the ◀ / ▶ buttons, and press the SET button.
 - To cancel formatting, select [Cancel] and press the **SET** button.
- To exit from the [Setup] menu, press the MENU button



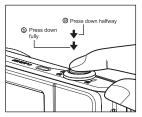


CAPTURE MODE

Capturing Images

Your camera is equipped with a 3.0" full color TFT LCD monitor to help you compose images, playback recorded images/video clips or adjust menu settings.

- 1. Press the **ON/OFF** button to turn the power on.
- 2. Press the MODE button, and set the camera mode to [].
- 3. Compose your image in the LCD monitor.
 - \blacksquare Turn the zoom lever to $\frac{0}{\mathbb{Q}}$ side to zoom in on the subject, and enlarges the subject on the LCD monitor.
 - Turn the zoom lever to ^{∞0}/_○ side to zoom out on the subject, and provides a wider angle image.
- 4. Press the shutter button.
 - Pressing the shutter button down halfway automatically focuses and adjusts the exposure, and pressing the shutter button down fully captures the image.
 - The focus area frame turns green when the camera is in focus and the exposure is calculated.
 - When the focus is not suitable, the frame of the focus area turns red.



AF Tracking Mode

Use this option to take pictures of moving subject.

- 1. Press the **MODE** button, and set the camera mode to [**D**].
- Press the ♥② button, and select [⑥] icon with the ◀ / ▶ buttons. Press the SET button.
- 3. To lock the desired tracking subject, press the ▼ button.
 - The frame automatically tracks the subject movement to focus on it continuously.
- 4. Press the shutter button down fully to capture your image.
 - When the camera fails to recognize or track the subject, the frame will turns red and blinks. After blinking of the red frame, the camera returns to unlock display.
 - Press the ▼ button, to returns to unlock display.

Setting the Scene Mode

By simply selecting one of the available scene modes, you can capture the image with the most appropriate settings.

- Press the MODE button, and set the camera mode to [], and press the SET button
- Select the desired scene mode with the ◀ / ▶ / ▲
 / ▼ buttons, and press the SET button.
- 3. Compose the image and press the shutter button.



The table below will help you choose the appropriate scene mode:

Scene mode	Description
Auto	Select this mode when you want to capture images without having to set special functions or manual adjustments.
Intelligent Scene	Select this mode when you want the camera to select an ideal shooting mode according to environment automatically.
Program AE	Select this mode when you want to set parameters manually other than the shutter speed and the aperture value.
Av Av	Select this mode when you want to capture images with the priority given to aperture.
™ Tv	Select this mode when you want to capture fast moving subjects in fast shutter speed, or capture still subjects in slow shutter speed.
Smile Detection	Select this mode to automatically capture an image when a smiling face is detected.
M Anti-shake	Select this mode when you want to minimize the influences of hand shaking when capturing an image.
Panorama PanCapture	Select this mode when you want the camera to combine pictures in the camera automatically.
1 LOMO	Select this mode when you want to create a lomo-like effect by adding over saturated colors, etc.
	Select this mode when you want to simulate a fisheye lens effect or to make a distorted hemisphere-like image.
☑ Toy	Select this mode when you want to simulate a shallow depth of field by gradually blurring the top and bottom areas of a composition.
■ HDR	Select this mode when you want to enlarge the dynamic range.

Scene mode	Description
■ De-blemish	Select this mode when you want the camera to reduce obvious blemishes and big spots on faces.
Skin Soften	Select this mode when you want the camera to reduce artifacts on faces.
Portrait Man	Select this mode when you want to capture an image that makes a man stand out against a blurred background.
Portrait Lady	Select this mode when you want to capture an image that makes a lady stand out against a blurred background.
☑ Night Scene	Select this mode when you want to capture dark scenes such as night views.
Night Portrait	Select this mode when you want to capture people with an evening or night scene background.
* Fireworks	Select this mode when you want to capture fireworks clearly with optimal exposure. The shutter speed becomes slower, so using a tripod is recommended.
iii Candlelight	Select this mode when you want to capture photos of candlelight scene, without spoiling the ambience.
Sports	Select this mode when you want to capture fast-moving subjects.
Pets	Select this mode when you want to capture your pets. Shoot from their eye level.
Landscape	Select this mode when you want to capture an image with infinity focus, hard sharpness and high saturation.
Natural Green	Select this mode when you want to capture the green scenery background such as forest. This mode helps to brighten the colors.
Flow Water	Select this mode when you want to capture the soft flowing water.
Splash Water	Select this mode when you want to capture photos of splashing water.
Sunset	Select this mode when you want to capture a sunset. This mode helps keep the deep hues in the scene.
Sunrise	Select this mode when you want to capture a sunrise. This mode helps keep the deep hues in the scene.
♣ Snow	Select this mode when you want to capture clear snow scenes without darkened subjects and bluish tint.
№ Beach	Select this mode when you want to capture bright beach scenes and sunlit water surfaces.
■ Text	Select this mode when you want to capture an image that contains black and white subjects like printed documents.

Taking Images with Intelligent Scene mode

In this Intelligent Scene mode, the camera can sense the ambient conditions and automatically select the ideal shooting mode.

- Press the MODE button, and set the camera mode to [], and press the SET button
- 2. Select [Intelligent Scene] with the ◀ / ▶ / ▲ / ▼ buttons, and press the **SET** button.
 - The camera can automatically select best mode for the shooting scene from [Auto] / [Landscape] / [Backlight] / [Portrait] / [Night] / [Night Portrait] / [Macro].
- 3. Compose the image, and press the shutter button down fully.

Taking Images When the Smile Feature Is On

With the camera's new "smile detection" function, this camera detects smiles so you do not miss those special moments in life.

- Press the MODE button, and set the camera mode to [], and press the SET button
- 2. Select [Smile Detection] with the ◀ / ► / ▲ / ▼ buttons, and press the SET button.
- 3. Compose the image, and press the shutter button down fully.
- Once the camera detects a smile, it will automatically capture 3 images (by default, the flash mode setting is set to ②).
 - If the [Capture Md.] is set to [Single], the camera will only capture an image after it detects a smile.
 - When capturing group shots (if the number of people is more than 1), the camera will automatically capture the image(s) when it detects two smiles.
 - If the camera does not detect a smile within 5 seconds, the camera returns to preview display.
 - Press the shutter button once again to reactivate this function.





Taking and Combining Panoramic Pictures

Pictures are manually shot, and the camera automatically combines pictures in the camera.

- Press the MODE button, and set the camera mode to [], and press the SET button.
- Select [Panorama PanCapture] with the ◀ / ▶ / ▲ / ▼ buttons, and press the SET button.
- 3. Select the photographic direction with the ◀ / ▶ buttons.
- 4. Shoot the first image.
 - The next image appears beside the previous image.
- Orient the camera so that the second frame overlaps a small portion of the photographic subject of the first image and press the shutter button to capture the next image.
- 6. Follow the same steps to capture subsequent images in the sequence.
- 7. After the third picture is taken, the pictures are automatically combined.



Set to [Panorama PanCapture] image size will be 2M.

Mode of Skin Soften and De-blemish

In order to make face taken look better and younger, mode of Skin Soften is added to reduce artifacts on faces, while mode of De-blemish is to reduce obvious blemishes and big spots on faces.

- 1. Press the **MODE** button, and set the camera mode to [], and press the **SET** button
- Select [Skin Soften] or [De-blemish] with the ◀ / ► / ▲ / ▼ buttons, and press the SET button.
- 3. Compose the image, and press the shutter button down fully.

Find Blur Function

With the camera's new "Find Blur" function, this camera finds the blurry photo when capture under Continuous.

- 1. Press the **MODE** button, and set the camera mode to [].
- Press the MENU button, and select [Find Blur] icon with the ▲ / ▼ buttons. Set "Find Blur" on.
- Press the shutter button to return to preview display.
- Press the shutter button down fully to capture your image.
- 5. Press the **SET** button to save the best image.
 - Press the **MENU** button to save all images.



Recording Shots using Face Detection Technology

Face Detection Technology can identify and focus on the human faces in the image.

- 1. Press the **MODE** button, and set the camera mode to [].
- Press the ♥♥ button, and select [♥] icon with the ◄ / ▶ buttons. Press the SET button
 - With Face Detection turned on, the camera identifies main face (white frame) and subsidiary faces (gray frames).
 - If the camera cannot detect and track any faces, there will be no frame shown on the screen.
- Press the shutter button halfway down to lock the focus.
 - When the main face is in focus, the white frame simultaneously turns green. Otherwise, it turns red.
- Press the shutter button down fully to capture your image.



Focus Lock

- Subjects that are not suitable with this function:
 - a. A person is wearing glasses, sunglasses, or face is covered with hat or hair.
 - b. A person turns sideways.

Self-portrait Function

Use this function to take pictures of yourself or include yourself in pictures.

- 1. Press the **MODE** button, and set the camera mode to [].
- Press the ⑤ button, and select [⑥] icon with the ◀ / ▶ buttons. Press the SET button.
- Press the shutter button.
- If the camera detect and track any faces, after twice blinking of the self-timer LED, one image will be captured.
 - Press the shutter button to exit.
 - If it does not detect any face within 30 seconds, the camera will automatically capture an image and return to preview display.
 - Select [) to reactivate this function.

Taking images with Interval Capture mode

This mode is used to capture continuous images at a preselected time interval.

- 1. Press the **MODE** button, and set the camera mode to []].
- Press the MENU button, and select [Capture Md.] with the ▲ / ▼ buttons, and press the SET button.
- 3. Select [Interval capture] with the ◀ / ▶ buttons, and press the **SET** button.
- 4. Press the **MENU** button, to exit from the [Capture] menu,
- Press the ▼ button and select the desired option item with the ◀ / ► buttons and press the SET button.
 - Self-timer is disable in interval capture mode.
 - You can select desired option item from [10 Sec.] / [30 Sec.] / [5 Min.] / [1 hr.].
- Compose the image, and press the shutter button down fully.
 - The camera will countdown from your preselected time interval and take the first picture.
 - The LCD display will turn off after 2 seconds to save battery power.
 - The camera will continue to take images at the preselected time interval, until:
 - a. Pressing the shutter button again.
 - b. The memory card is full.
 - c. The battery is empty.



VIDEO MODE

Recording Video Clips

This mode allows you to record video clips at a resolution of 320 x 240 / 640 x 480 / 720p pixels.

- 1. Press the **MODE** button, and set the camera mode to [im].
- 2. Compose the image.
- 3. Press the shutter button.
 - The recording of the video clip will start.
 - Pressing the shutter button one more time will end the recording of the video clip.
 - The recording time depends on the storage size and the subject of the image to be recorded.
 - The zoom function cannot be used during video recording.





- When recording a video clip, the flash and "10+2 sec." self-timer function cannot be used.
- If the write speed of your SD/SDHC memory card is not fast enough for recording video clips in the currently selected quality, the video recording will stop. In this case, select a video quality lower than the current one.

Playing Back Video Clips

You can play back recorded video clips on the camera. You can also play back sound if recorded with the video.

- Press the ▶ button.
 - The last image appears on the screen.
- 2. Select the desired video clip with the ◀ / ▶ buttons.
- 3. Press the SET button.
 - A press of the ▶ / ◀ buttons during playback allows fast forward play / fast reverse play.
 - To stop video playback, press the ▼ button.
 - This stops playback and returns to the start of the video clip.
 - To pause video playback, press the **SET** button. This pauses video playback.
 - To cancel pause, press the **SET** button again.



- Video clips cannot be displayed rotated or enlarged.
- Windows Media player or QuickTime Player is recommended to play back the video clip on your computer.
- QuickTime Player is a free media player available at <u>www.apple.com</u>; and compatible with Mac and Windows computers.
- For more information about the operation of the media player, refer to its respective help documentation.
- When watching a movie on a computer, frames may drop, it may not play smoothing, and the audio may stop suddenly depending on the computer's capabilities.

PLAYBACK MODE

Playing Back Still Images

You can play back the still images on the LCD monitor.

- 1. Press the **b** button.
 - The last image appears on the screen.
- The images can be displayed in forward or reverse sequence with the ◀ / ▶ buttons.
 - To view the previous image, press the ◆ button.
 - To view the next image, press the ▶ button.

 - To return to normal magnification, turn the zoom lever to $\stackrel{\mbox{\tiny 60}}{\hookrightarrow}$ side.





Entire image Current position of enlargemen



An [] icon is displayed with images which have an audio memo recorded.

Thumbnail Display

This function allows you to view 9 thumbnail images on the LCD monitor at the same time, which can let you quickly search for the image that you want.

- 1. Press the ▶ button.
 - The last image appears on the screen.
- 2. Press the 🗠 button.
 - The images are displayed in the thumbnail display.
 - Images that have been selected with the ◀ / ▶ / ▲ / ▼ buttons will be indicated by a yellow frame.
 - When there are ten or more images, scroll the screen with the ▲ / ▼ buttons.
- 3. Press the ◀ / ▶ / ▲ / ▼ buttons to select the image to be displayed at regular size.
- 4. Press the SET button.
 - The selected image is displayed at its regular size.



Attaching Voice Memos

A maximum of 30 seconds of audio can be recorded as a memo for captured still images.

- Press the ▶ button.
 - The last image appears on the screen.
- Select the image to which you want to attach the voice memo with the ◀ / ▶ buttons.
- 3. Press the MENU button.
- 4. Select [Voice Memo] with the ▲ / ▼ buttons, and press the **SET** button.
- 5. Press the SET button.
 - [] is displayed on the screen and recording starts.
- 6. To stop recording a voice memo as it is being recorded, press the **SET** button again.
 - An [] icon is displayed with images that have been recorded with a voice memo.



RE-REC mode can only be used for the recorded and selected file, and it can record voice memo repeatedly to replace the previous recordings.

Playing back voice memo

A press of the **SET** button displays [] and plays back the voice memo.





Voice memo is only available for still images.

Protecting Images

Set the data to read-only to prevent images from being erased by mistake.

- Press the ▶ button.
 - The last image appears on the screen.
- Press the MENU button.
- Select [Protect] with the ▲ / ▼ buttons, and press the SET button.
- 5. Select [Single] or [All] with the ◀ / ▶ buttons, and press **SET** button.
- Select [Set] with the ◀ / ▶ buttons, and press the SET button.
 - Protection is applied to the image and the camera returns to the playback mode.
 - The protect icon [om] is displayed with protected images.

When [All] has been selected, [on] is displayed with all the images.







Canceling the Protection

To cancel protection for only one image, display the image on which you want to remove the image protection.

- 1. Press the ▶ button.
 - The last image appears on the screen.
- Select the image that you want to cancel protection with the ◀ / ▶ buttons.
- 3. Press the **MENU** button.
- 4. Select [Protect] with the ▲ / ▼ buttons, and press the **SET** button.
- 5. Select [Single] or [All] with the ◀ / ▶ buttons, and press the **SET** button.
- 6. Select [Cancel Protect] with the ◀ / ▶ buttons, and press the **SET** button.
 - The removal of image protection is executed and the camera returns to the playback mode.



 Formatting an SD/SDHC memory card overrides protection, and erases all images regardless of their protected status.

Removing Red-eye

You can use this function to remove the red-eye effect after an image is taken.

- Press the ▶ button.
 - The last image appears on the screen.
- Select the image that you want to edit with the ◀
 / ▶ buttons.
- 3. Press the MENU button.
- 4. Select [Fix Red Eyes] with the ▲ / ▼ buttons, and press the **SET** button.
- 5. Select [Execute] with the ◀ / ▶ buttons, and press the **SET** button.
- 6. View the changes on the corrected image.
- To save your corrected image, select [Confirm] with the ◀ / ▶ buttons, and press the SET button.
 - When this process ends, this replaces the original image with the corrected image.





Erasing Images

Erasing a single image / Erasing all images

- Press the ▶ button.
 - The last image appears on the screen.
- Select the image you want to erase with the ◀ /
 ▶ buttons.
- 3. Press the MENU button.
- Select [Delete] with the ▲ / ▼ buttons, and press the SET button.
- 5. Select [Single] or [All] with the ◀ / ▶ buttons, and press the **SET** button.
 - [Single]: Erases the selected image or the last image.
 - [All]: Erases all of the images except for the protected images.
- 6. Select [Execute] with the ◀ / ▶ buttons, and press the **SET** button.
 - To not erase, select [Cancel], and press the SET button.
- 7. To exit from the menu, press the MENU button.





DPOF Settings

DPOF is the abbreviation for Digital Print Order Format, which allows you to embed printing information on your memory card. You can select the images to be printed and how many prints to make with the DPOF menu in the camera and insert the memory card to the card compatible printer. When the printer starts printing, it will read the embedded information on the memory card and print the specified images.

- 1. Press the ▶ button.
 - The last image appears on the screen.
- Select the image that you want to set DPOF with the ◀ / ▶ buttons.
- 3 Press the **MENU** button
- Select [DPOF] with the ▲ / ▼ buttons, and press the SET button.
 - The DPOF setting screen is displayed.
- Select [Single] or [All] with the ◀ / ▶ buttons, and press the SET button.
 - [Single]: Sets DPOF for each individual image.
 - [All]: Sets DPOF for all images at once.
- Select [Print Num.] with the ▲ / ▼ buttons, and press the SET button.
 - This displays the number of prints setting screen
- Set the number of prints with the ◀ / ▶ buttons, and press the SET button.
- Select [Date Print] with the ▲ / ▼ buttons, and press the SET button.
 - The date setting screen appears.
- Select date to [On] or [Off] with the ◀ / ▶ buttons, and press the SET button.
 - [On]: The date of the image will also be printed.
 - [Off]: The date of the image will not be printed.
 - \blacksquare The DPOF icon $[\blacksquare]$ is displayed on each image that has set up DPOF settings.



The date that is printed on the image is the date set on the camera. To print the correct date on the image, set the date on the camera before you capture the image. Refer to the section in this manual titled "Setting the Date and Time" for further details.







MENU OPTIONS

Capture Menu

This menu is for the basic settings to be used when capturing still images.





- 1. Press the **ON/OFF** button to turn the power on.
- 2. Press the **SET** button, and set the camera mode to any scene mode.
- 3. Press the **MENU** button to enter the [Capture] menu.
- Select the desired option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
 - The selectable items may vary in different capture modes.
- 5. Select the desired setting with the ◀ / ▶ buttons, and press the **SET** button.
- 6. To exit from the menu, press the **MENU** button.

Size

This sets the size of the image that will be captured.

* 14M / 8M / 4M / 2M / VGA

ISO

This sets the sensitivity for capturing images. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear. Set to ISO 3200 or 6400 image size will be 2M.

* Auto / ISO 100 / ISO 200 / ISO 400 / ISO 800 / ISO 1600 / ISO 3200 / ISO 6400

Quality

This sets the quality (compression) at which the image is captured.

* Fine / Standard / Economy

W. Balance

This sets the white balance for a variety of lighting conditions and permits images to be captured that approach the conditions that are seen by the human eye.

*Auto / Incand. / Fluoresc.1 / Fluoresc.2 / Daylight / Cloudy / Manual WB

Sharpness

This sets the sharpness of the image that will be captured.

* Hard / Standard / Soft

EN-30

Color

This sets the color of the image that will be captured.

* Standard / Vivid / Color Accent (Red) / Color Accent (Green) / Color Accent (Blue) / Sepia / B&W / Red / Green / Blue

Saturation

This sets the saturation of the image that will be captured.

* High / Standard / Low

Metering

This sets the metering method for calculating the exposure.

* Center: Averages the light metered from the entire frame, but gives greater

weight to the subject matter at the center.

* Spot: A very small portion of the center of the screen is measured to

calculate the correct exposure.

* Average: The exposure is measured all of the image area.

O.I.S.

This sets whether or not to use image stabilization at the time of photography. This function minimizes the influences of hand shaking when you want to capture an image. * On / Off

■ The O.I.S motor sound could be heard when this function is enable.

Capture Md.

This sets the recording method at the time of capturing images.

* Single: Captures one image at a time.

* Continuous: Permits continuous capture of up to 3 images.

* AEB: Permits 3 consecutive images in the order of standard exposure.

underexposure and overexposure compensation.

* Album Shot: Creates an album-like layout to combine 3 shots into a single

image.

* Burst: Permits continuous photography while pressing and holding the

shutter button. As long as you hold the shutter button pressed, images are captured until the memory capacity is exhausted.

* Cont.flash: Permits continuous capture of up to 3 images with flash.

* Pre-shot: Select a background by 1st shot, the image shown on display will

be transparent, then take the 2nd shot on the basis of 1st image. Image of 1st shot is only a guiding tool, it won't be saved on SD card. Normally this function is used when taking a portrait picture and the background is selected by the model instead of the

photographer.

* Coupl.shot: Uses separate areas to combine two shots. You can include

yourself in the shot.

* Burst 30fps: Permits continuous capture of up to 30 images in the resolution

640 x480 within 1 second.

* Interval capture: Captures continuous images at a preselected time interval.

Quick Shot

If this function is set to "On", the camera takes a quick shot without focusing.

* On / Off

Digi. Zoom

This sets whether or not to use digital zoom at the time of photography.

* On / Off

Find Blur

Refer to the section in this manual titled "Find Blur Function" for further details.

* On / Off

Preview

This sets whether or not to display the captured image on the screen immediately after the image is captured.

* On / Off

Date Print

The date of recording can be printed directly on the still images. This function must be activated before the image is captured.

* On / Off

Setup

Refer to the section in this manual titled "Setup Menu" for further details.

Video Menu

This menu is for the basic settings to be used when recording video clips.





- 1. Press the **MODE** button, and set the camera mode to [m].
- 2. Press the **MENU** button to enter the [Video] menu.
- Select the desired option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- 4. Select the desired setting with the ◀ / ▶ buttons, and press the **SET** button.
- 5. To exit from the menu, press the **MENU** button.

Size

This sets the size of the video clip that will be captured.

* HD / VGA / QVGA

Quality

This sets the quality (compression) at which the video clip is captured.

* Fine / Standard

Color

This sets the color of the video clip that will be captured.

* Standard / Vivid / Color Accent (Red) / Color Accent (Green) / Color Accent (Blue) / Sepia / B&W / Red / Green / Blue

Audio

This sets whether or not to record audio at the time of video recording.

* On / Off

Digi. Zoom

Refer to the section in this manual titled "Digi. Zoom" in Capture Menu for further details.

Setup

Refer to the section in this manual titled "Setup Menu" for further details.

Playback Menu

In the [1] mode, choose which settings are to be used for playback.





- Press the ▶ button.
- 2. Press the MENU button.
- Select the desired option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- 4. Select the desired setting with the ◀ / ▶ buttons, and press the **SET** button.
- 5. To exit from the menu, press the **MENU** button.

Delete

Refer to the section in this manual titled "Erasing Images" for further details.

Fix Red Eyes

Refer to the section in this manual titled "Removing Red-eye" for further details.

Slide Show

This function enables you to play back your still images automatically in order one image at a time.

* 3 Sec. / 5 Sec. / 10 Sec.

DPOF

Refer to the section in this manual titled "DPOF Settings" for further details.

Protect

Refer to the section in this manual titled "Protecting Images" for further details.

Voice Memo

Refer to the section in this manual titled "Attaching Voice Memos" for further details.

Resize

Resizes a previously saved image. Resizing replaces the original image with the changed image. It is only possible to resize to a smaller size.

Qual. Change

Changes the quality (compression) of a recorded image. Compress images down to half of their size or less, overwrite old size images with newly compressed images. It is only possible to reduce the image quality/size, never to increase it.

Copy to Card

Allows you to copy your files from the camera's internal memory to an SD/SDHC memory card. Of course, you can only do this if you have a memory card installed and some files in internal memory. All files remain in the internal memory, even after copy to the SD/SDHC memory card from the internal memory.

* Execute / Cancel

Setup

Refer to the section in this manual titled "Setup Menu" for further details.

Setup Menu

Set your camera's operating environment.





- Press the MODE button, and set the camera mode to [☐] or [☐]; or press the ► button
- 2. Press the MENU button.
- Select the [Setup] at the end of the Menu with the ▲ / ▼ buttons, and press the SET button
- Select the desired option item with the ▲ / ▼ buttons, and press the SET button to enter its respective menu.
- 5. Select the desired setting with the ◀ / ▶ buttons, and press the **SET** button.
- 6. To exit from the menu, press the **MENU** button.

Date/Time

Refer to the section in this manual titled "Setting the Date and Time" for further details.

Language

Refer to the section in this manual titled "Choosing the Language" for further details.

Auto Off

If no operation is performed for a specific period of time, the power to the camera is automatically turned off. This feature is useful for reducing battery usage.

* Off / 1 Min / 2 Min / 3 Min

Beep

This sets whether or not to mute the camera sound each time you press the camera's buttons.

* On / Off

Display

This sets the image information display state.

* Standard / All / Off

Video Out

This sets your camera to match the system of the equipment that you are going to connect to the camera.

* NTSC / PAL

Fr. No. Reset

This creates a new folder. The captured images are recorded to the newly created folder from number 0001.

* Execute / Cancel

Light Freq.

This camera supports different lighting frequencies: 50 Hz and 60 Hz. When photographing under fluorescent lighting, select the correct frequency setting depending in your local area's voltage.

* 50 Hz / 60 Hz

LCD Bright.

Select a brightness level for the LCD monitor.

* Auto / Normal / High

Format

Refer to section in this manual titled "Formatting the Memory Card or Internal Memory" for further details.

Media Info.

This displays the free capacity of the internal memory or the memory card.

Sys. Info.

This displays the firmware version of the camera.

Sys. Reset

This returns all basic settings to the camera's default settings.

* Execute / Cancel

TRANSFERRING FILES TO YOUR COMPUTER

System Requirement

Windows	Macintosh		
■ Pentium III 1GHz or equivalent	■ PowerPC G3/G4/G5		
■ Windows 7/XP/Vista	■ OS 10.3.9 or later		
■ 512MB RAM	■ 256MB RAM (512 MB recommended)		
■ 150MB available hard disk space	■ 128MB available hard disk space		
■ CD-ROM drive	■ CD-ROM drive		
Available USB port	Available USB port		

Downloading Your Files

- 1. Turn on your camera.
- Connect the camera to your computer with the USB cable.
- Select [PC] using the ▲ / ▼ buttons and press the SET button.



- From the Windows desktop, double click on "My Computer".
- 5. Look for a new "removable disk" icon.
- 6. Double click on the removable disk and locate the DCIM folder.
 - Your recorded images and video clips will be inside the folders of DCIM folder.
 - Copy&Paste or Drag-N-Drop image and video files to a folder on your computer.

Mac users: Double-click the "untitled" or "unlabeled" disk drive icon on your desktop. iPhoto may automatically launch.



Black screen appears when camara is conneted with PC without battery inside.

EDITING SOFTWARE INSTALLATION

Softwares are included on the CD-ROM:

ArcSoft MediaImpression™ - Easily, creatively, and productively manage your multimedia files. Create your own movies or photo slide shows, and share your photo, video and music files easily through simple email attachments or popular photo printing and video sharing websites.

Print Creations - brings you a family of fun and easy print-project software that brings out the creativity in you. You can personalize the designs with your own digital pictures and text based on professionally designed templates and layouts. Projects can be printed at home or saved as image files for sharing with family and friends by email or the web.

To install software:

- Insert the CD-ROM that came with the camera into your CD-ROM drive.
 The welcome screen appears.
- Click the respective software name.Follow the on-screen instructions to complete the installation.



- For more information about the operation of the software, refer to its respective help documentation.
- For Windows 7/XP/Vista users, please make sure to install and use the software in "Administrator" mode.
- The software is not supported by Mac.

SPECIFICATIONS

Item	Description		
Sensor	Panasonic 14 Mega Pixels, 1/2.33 inch CCD		
Zoom	Optical: 7X Wide Angle Digital: Up to 6X(Preview) / Up to 4X(Playback)		
Lens	f = 5 (W) ~ 35 (T) mm F= 3 (W) ~ 5.9 (T) (f = 28~196mm, 35mm equivalent)		
Focus Range	Normal: W=60cm ~ Infinity; T=100cm ~ Infinity Macro: W=20cm ~ Infinity; T=60cm ~ Infinity Super Macro: 2cm		
LCD	3.0" LCD 460k pixels		
Image Resolution	14M / 8M / 4M/ 2M / VGA		
Movie Mode	HD 720p (1280 x 720) / VGA (640 x 480) / QVGA (320 x 240) 30 fps,Continuous recording with sound		
Shutter Speed	1 ~ 1/2000 sec. (Fireworks 2 sec.; Night Scene 1/2000 ~ 2 sec.)		
White Balance	Auto / Incand. / Fluoresc.1 / Fluoresc.2 / Daylight / Cloudy / Manual WB		
Exposure	-2.0 ~ +2.0 EV (0.3 EV / step)		
ISO	Auto / 100 / 200 / 400 / 800 / 1600 / 3200 (2M or lower) / 6400 (2M or lower)		
Flash	Auto / Flash On / Flash Off / Red-eye / Slow Sync / Pre-flash		
Drive mode	Self-portrait / 2 sec. / 10 sec. / 10+2 sec. / Continuous / AEB / Album Shot / Burst / Cont. flash / Pre-shot / Coupl.shot / Burst 30fps / Interval Capture		
Power Source	CIPA approx 200 base on bundle Li-ion battery		
Storage Type	Built-in Approx. 23MB SD/SDHC card compatible(Up to 32GB)		
File Format	Still Image: JPEG (EXIF 2.2 compatible) DCF compatible; Video: MJPEG; Audio: WAV		
Dimensions / Weight	97.5 x 58 x 19.4 mm 130g (w/o battery & SD card)		
Interface	Digital output: USB 2.0 compatible		
Accessory	USB Cable / AV cable / Software & UM CD / Quick Guide / Hand Strap / Pouch / USB Adapter / Li-ion Battery		

^{*} Design and specifications are subject to change without notice.

APPENDIX

Possible Number of Shots

Possible number of shots (still image)

The table shows the approximate shots that you can capture at each setting based on the capacity of the internal memory and the SD/SDHC memory card.

	()Hality	Internal	SD/SDHC memory card capacity					
Size		Memory	1GB	2GB	4GB SDHC	8GB SDHC	16GB SDHC	32GB SDHC
14	₩ Fine	2	139	283	557	1135	2285	4584
м́ ^р 4288 x 3216	Standard	5	243	495	972	1979	3983	7991
	Economy	8	385	785	1542	3139	6316	12671
8	Fine	4	201	410	805	1640	3300	6621
8 MP 3264 x 2448	Standard	8	348	708	1391	2831	5697	11429
	Economy	13	582	1184	2325	4732	9522	19102
4	Fine	7	335	682	1340	2729	5491	11015
2304 x 1728	Standard	13	558	1136	2232	4543	9141	18338
2004 X 1720	Economy	23	957	1948	3825	7785	15665	31424
2,50	Fine	13	567	1154	2267	4614	9284	18625
™ 1600 x 1200	Standard	22	917	1867	3666	7462	15014	30118
1000 X 1200	Economy	37	1544	3140	6167	12550	25251	50654
VGA	Fine	47	1955	3977	7810	15895	31981	64154
640 x 480	Standard	68	2794	5683	11160	22711	45695	91663
040 X 400	Economy	110	4514	9180	18025	36682	73804	99999

Possible recording time / sec (video clip)

	Quality	Internal Memory	SD/SDHC memory card capacity					
Size			1GB	2GB	4GB SDHC	8GB SDHC	16GB SDHC	32GB SDHC
HD	⊞ Fine	0:00:08	0:06:04	0:12:21	0:24:16	0:49:23	1:39:22	3:19:20
1280 x 720	Standard	0:00:09	0:06:49	0:13:53	0:27:16	0:55:31	1:51:42	3:44:05
VGA	⊞ Fine	0:00:10	0:07:35	0:15:25	0:30:17	1:01:38	2:04:01	4:08:48
640 x 480	Standard	0:00:19	0:13:34	0:27:36	0:54:12	1:50:18	3:41:57	7:25:13
Q- VGA	⊞ Fine	0:00:32	0:22:25	0:45:36	1:29:33	3:02:15	6:06:42	12:15:36
320 x 240	Standard	0:00:48	0:33:16	1:07:40	2:12:53	4:30:26	9:04:08	18:11:31

^{*} The table above shows the approximate maximum recording times. These are the total times for all clips. A video recording will stop automatically when a video clip becomes approx. 4GB or 25 minutes.

^{*} We recommend a memory card of at least 10MB/Sec write speed to prevent auto stop or unexpected results. If you experience an error using a slower SD/SDHC memory card, you can set your camera's video recording to QVGA (320 x 240) and standard quality.

^{*} SDHC Class6 or above is required for HD movie recording.

Connecting to a PictBridge Compliant Printer

If a printer that supports PictBridge is available, images can be printed by connecting the digital still camera directly to the PictBridge-compatible printer without using a computer.

Connecting the camera to the printer

- Connect one end of the USB cable to your camera.
- Connect the other end of the USB cable to the USB port on the printer.
- 3. Turn on your camera.
- The [USB] screen is displayed. Select [PictBridge] with the ▲ / ▼ buttons, and press the SET button



Printing images

When the camera is properly connected to a PictBridge compliant printer, the PictBridge menu is displayed on the monitor.

- Select the item you want to configure with the / ▼ buttons, and press the SET button.
 - [Images]:Select whether you want to print specific image or all images. You may also select the printing number for a specific image.
 - [Date Print]:According to the printer type, select whether you want to print the image with date imprint or not.
 - [Paper Size]:Select the desired paper size according to the printer type.
 - [Layout]:Select the desired printing layout according to the printer type.
 - [Print]:After all settings are configured, select this item to start printing.
- If you select [Images] in the previous step, the figure shown on the right hand side will appear.
 Select [Single], [All] or [DPOF] with the ▲ / ▼ buttons, and press the SET button.
 - [Single]:Select to print one specific image.
 - [All]:Select to print all images.
 - [DPOF]:Select to print images with DPOF settings.
 - [Exit]:Exit from Images option.





- If you select [Single] in the previous step, the figure shown on the right hand side will appear.
 - Select the image that you want to print with the
 ✓ / ▶ buttons.
 - Select the print number (up to 99) with the ▲ /
 ▼ buttons
 - After selecting the desired image and printing number, press the SET button to confirm.
- Select [Exit] with the ▲ / ▼ buttons, and press the SET button





 Select [Print] with the ▲ / ▼ buttons, and press the SET button to start printing.



PRINTING

- 6. The printing starts and the figure shown on the right hand side appears.
 - [COMPLETE] will be displayed temporarily, reminding you that the printing procedure is finished.
 - If an error is detected during the connection (i.e. a printer hardware problem) between camera and printer, [PRINT ERROR] will be displayed.
 - If an error is detected during the communication (i.e. wrong setting on the camera) between camera and printer, [ERROR] will be displayed.



The image printing may fail if the power to the camera is cut off.

Troubleshooting and service information

If your camera cannot operate normally, see the frequently encountered problems and solutions listed below. If the problem persists, contact your nearest service center or technical support.

Problem	Cause	Solution	
The camera cannot power up.	There is no battery or the battery is not inserted correctly.	Insert the battery correctly.	
	The battery has no power.	Replace the battery.	
The battery power is	The external temperature is extremely low.		
draining quickly.	Many shots are being captured in dark places, requiring a flash.	-	
The battery or camera is warm.	The camera or flash was used continuously over a long period of time.		
The flash does not fire	The camera flash is turned off.	Set the flash to Auto Flash.	
or recharge.	The light source is sufficient.		
Even though the flash fired, the image is dark.	The distance to the subject is greater than the flash's effective range.	Get closer to the subject and shoot.	
The image is too bright or too dark.	The exposure is excessive or inadequate.	Reset exposure compensation.	
I cannot format a memory card.	The memory card is write-protected.	Remove the write protection.	
incinory card.	End of the memory card life.	Insert a new memory card.	

I cannot download images from the camera to my computer.	The free space on the hard disk of your computer is insufficient.	Ensure that the hard disk has enough space for running Windows and that the drive for loading image files has free space equal to or greater than the memory card in the camera.		
	There is no power being supplied to the camera.	Replace the battery.		
	The battery is running low.	Replace the battery.		
	The camera is not in the Capture mode.	Switch to the Capture mode.		
The camera does not	The shutter button was not pressed all the way down.	Press the shutter button all the way down.		
shoot even when pressing the shutter button.	The internal memory or memory card does not have any free space.	Load a new card or delete unwanted files.		
	The flash is recharging.	Wait until the status LED stops flashing.		
	The camera does not recognize the memory card.	Format the memory card before the initial use or before using with another camera.		
I cannot print images with PictBridge-compliant printers.	The camera is connected to the printer when the camera is powered off.	Connect the camera to the printer, turn on the camera, and then select Printer .		

Technical support

For technical assistance, free driver updates, product information, and news releases, visit the following web site:

http://www.BenQ.com